SIDE LINING FOR ZIPPERS

BACKGROUND OF THE INVENTION

The present invention is related to a side lining for zippers, mainly made up of an elastic belt-like piece attached to both lateral sides of a zipper respectively wherein the elastic belt-like piece is synchronically woven by weaving yarns and elastic yarns. Each one or more than one elastic yarns constitutes a bound bundle, and each of the weaving yarns aligned in rows is tightly interwoven with the adjacent bound bundles, alternatively up and down first with one and then a number of bound bundles in a sequence till each bound bundle of the elastic yarn thereof concealed at the weaving yarns therein. Via the weaving structure thereof, the elastic belt-like piece can be flexibly expanded sideway without being hindered by the weaving yarns in case of an overloaded baggage/purse, or overstretched clothing, facilitating an easy and smooth operation of the zipper without getting stuck when zipping up, and preventing the zipper zipped up from bursting open when the side lining is expanded for a long time by the swollen baggage/purse, or clothing so as to effectively prolong the using lifetime of the zipper thereof.

Please refer to Fig. 1. A conventional side lining for zippers is mainly made up of a side lining 10 attached to both lateral sides of a zipper 11 respectively wherein the side lining 10 is directly interwoven via warp and weft yarns into a non-elastic belt-like piece. In case of an overloaded baggage/purse, or overstretched clothing due to obesity, the zipper 11 can easily get stuck in operation when zipping up thereof. Once zipped up, the zipper 11 also can easily burst open when the side lining 10 is stretched outwards by the swollen

baggage/purse, or clothing, disarraying the articles in the baggage/purse or clothes thereof. In case seamed to the rear side of clothes such as a dress or pants, the zipper 11 can easily embarrass a wearer by directly bursting open when the side lining 10 is expanded sideway when the wearer bends or crouches downwards for a long time.

SUMMARY OF THE PRESENT INVENTION

It is, therefore, the primary purpose of the present invention to provide a side lining for zippers, mainly made up of an elastic belt-like piece attached to both lateral sides of a zipper respectively wherein the elastic belt-like piece is synchronically woven by weaving yarns and elastic yarns. Via the weaving structure thereof, the elastic belt-like piece can be flexibly expanded sideway without being hindered by the weaving yarns in case of an overloaded baggage/purse, or overstretched clothing due to obesity, facilitating an easy and smooth operation of the zipper without getting stuck when zipping up.

It is, therefore, the secondary purpose of the present invention to provide a side lining for zippers wherein the elastic belt-like piece tightly interwoven by the weaving yarns and elastic yarns thereof can prevent the zipper zipped up from bursting open when the side lining thereof is stretched outwards for a long time by the swollen baggage/purse, or clothing so as to effectively prolong the using lifetime of the zipper thereof.

It is, therefore, the third purpose of the present invention to provide a side lining for zippers wherein each elastic yarn is made up of an elastic rubber thread disposed at the inner layer thereof, and multi-layers of outer threads winding around the elastic rubber thread; whereby, in case a needle careless

pierces through the elastic rubber thread in weaving, the multi-layers of outer threads thereof can precisely conceal the elastic rubber thread therein for protection, achieving the best elastic condition of the side lining thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a diagram showing a conventional side lining for zippers bursting open in practical use.

Fig. 2 is a perspective view of the present invention with one side lining thereof flexibly expanding sideway.

Fig. 3 is an enlarged perspective view of an elastic yarn of the present invention.

Fig. 4 is an enlarged cross sectional view of the side lining of the present invention.

Fig. 5 is another enlarged cross sectional view of the side lining of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please refer to Fig. 2. The present invention is related to a side lining for zippers, including a side lining 20 and a zipper 21 wherein the side lining 20 is mainly made up of an elastic belt-like piece 22 attached to both lateral sides of the zipper 21 respectively. The elastic belt-like piece 22 is synchronically woven by weaving yarns 201 and elastic yarns 202 wherein each elastic yarn 202 has an elastic rubber thread 2021 disposed at the inner layer thereof, and multi-layers of outer threads 2022 winding around the elastic rubber thread 2021 therein in weaving. Each one or more than one elastic yarns 202 may constitute a bound

bundle 2023, and each of the weaving yarns 201 aligned in rows is interwoven with the adjacent bound bundles 2023, alternatively up and down first with every one and then a number of bound bundles 2023 thereof in a sequence as shown in Fig. 4. Meanwhile, the elastic belt-like piece 22 is tightly interwoven by the weaving yarns 201 and the elastic yarns 202 with each bound bundle 2023 of the elastic yarn 202 thereof concealed at the weaving yarns 201 therein as shown in Fig. 5. Thus, via the weaving structure of the weaving yarns 201 and the elastic yarns 202 thereof, the elastic belt-like piece 22 can be flexibly stretched out without being hindered by the weaving yarns 201. In case of an overloaded baggage/purse, or overstretched clothing due to obesity, the elastic belt-like piece 22 of the side lining 20 will be flexibly expanded sideway therewith, facilitating an easy and smooth operation of the zipper 21 without getting stuck when zipping up thereof. Besides, the elastic belt-like piece 22 thereof can also prevent the zipper 21 zipped up from bursting open when the side lining 20 thereof is influenced by the expansion force of the swollen baggage/purse, or clothing thereof, effectively prolonging the using lifetime of the zipper 21. Finally, in case the elastic rubber thread 2021 disposed at the inner layer of the elastic yarn 202 thereof is pierced through by a needle in weaving, the multi-layer of outer threads 2022 thereof winding around the elastic rubber threads 2021 thereof, can precisely conceal the elastic rubber thread 2021 therein for protection thereof, achieving the best elastic condition of the side lining 20 thereof.